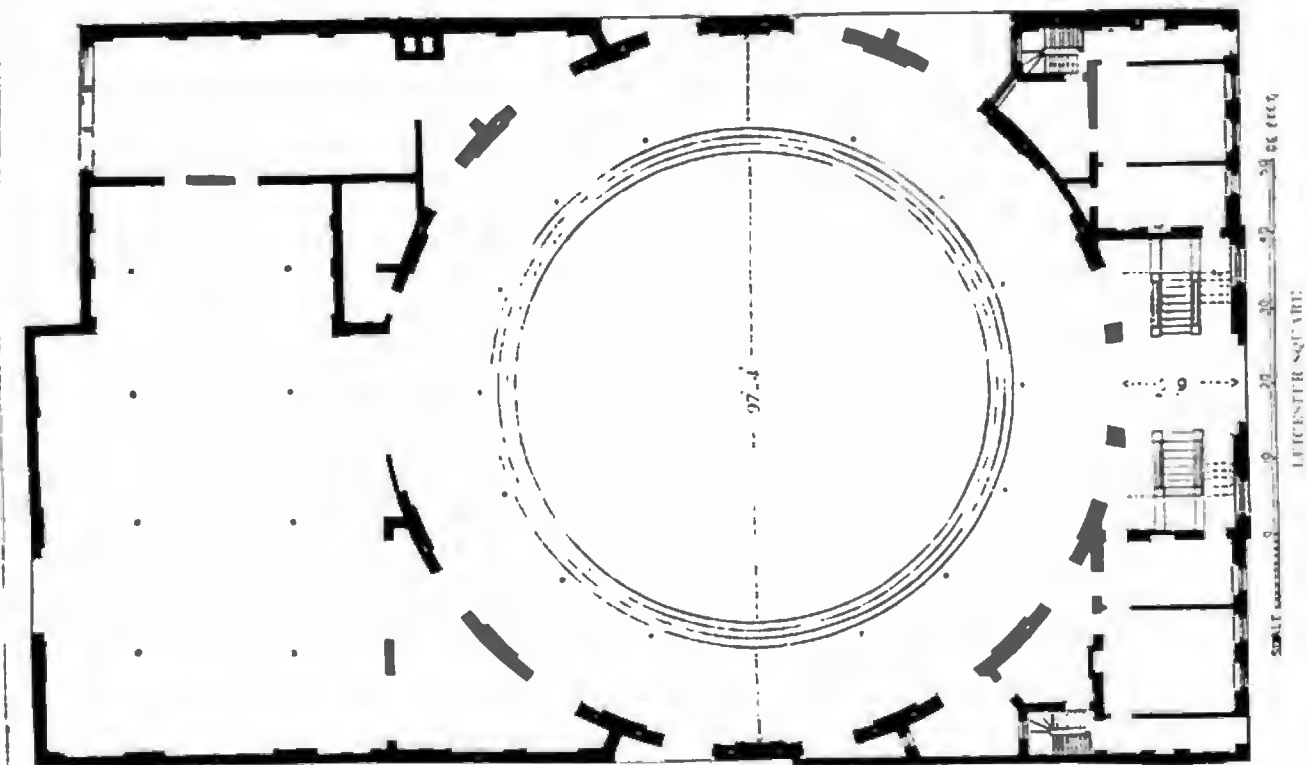


PLAN OF THE PANOPTICON.



ROYAL PANOPTICON OF SCIENCE AND ART.

THE space on the east side of Leicester-square, long vacant, is now being covered with a building, as our readers have already heard, for the Panopticon of Science and Art, and in our present number we give a view and plan of the intended structure.

The objects which it is the intention of the council of this institution to carry out are principally the promotion of science and the useful arts, by the means of popular lectures, and the illustration of history and literature by pictorial views and representations, to be accompanied by music. In addition, however, to these attractions, the Panopticon, it is said, is to afford the opportunity of observing, in all their varied ramifications, the industrial and mechanical arts, from the first state of the raw material up to the most highly-finished stage of perfection. The council propose to secure in all respects the most efficient auxiliaries, both as regard music and science; and the orchestral instrument, which is now in process of construction by Messrs. Wm. Hill and Co., will, it is stated, be second to none in the metropolis, while the scientific apparatus will embrace, among other novelties, a stupendous electrical machine, with a glass plate of 10 feet diameter, which it is proposed to work by means of a steam-engine.

An important feature in the intended arrangements of the Institution is a plan whereby a great impediment to the success of Mechanics' Institutes, particularly in the country, may be removed: it has been found that the funds of such societies are seldom sufficient to procure the requisite apparatus for the illustration of their lectures, which are consequently divested of much of their interest, and in order to obviate this difficulty, the council of the Panopticon propose to form a large collection of apparatus, suitable for lectures in every branch of natural and experimental science, which will be lent out on hire upon moderate terms.

It is proposed to have two daily exhibitions, one in the morning devoted more especially to scientific information and research, while the evening entertainments will partake of a lighter and more amusing character.

The plan of the building, which was de-

signed and is being carried out by Messrs. Finden and Lewis, comprehends a grand central hall, 97 feet diameter, domed over for the exhibition of machinery, manufactures, works of art, &c., and for exhibitions of various descriptions. There will be a lecture-room, laboratory, &c. All the buildings are designed in the Saracenic style, after models and details, chiefly from the existing remains at Cairo. The contour of the dome is taken from a daguerreotype of a dome at Cairo. It will be formed of glass and iron on the ridge and furrow principle. The façade will be formed in cement.

WORKING MENS' READING-ROOM, CARLISLE.

THE opening of the new reading-room recently built by the John-street (Botcher-gate) working men, was celebrated on Monday week by a public *soirée*. The architect was Mr. Hogg, who acted gratuitously for the members. The whole of the building work was executed by Mr. Thos. Lattimer, and the woodwork by Messrs. Coates and Little. The building is in the Elizabethan style. The area of the ground is 70 feet 6 inches by 52 feet 8 inches, or 412½ square yards, containing—reading-room, 53 feet long by 24 feet wide; area, 1,272 square feet; school-room, 25 feet by 24 feet 6 inches, area, 612 square feet; committee-room, 24 feet 6 inches by 10 feet 2 inches wide, area 259 square feet; library (a gallery above the committee-room), 24 feet 6 inches by 14 feet 6 inches, containing 355 square feet. The reading-room, school-room, and committee-room, occupy 2,143 square feet, leaving for the necessary back offices and yards, 1,570 square feet, or 174½ square yards. The building was decorated for the occasion. The mayor took the chair, and about 500 persons were present. The Dean of Carlisle, Mr. W. N. Hodgson, M.P., the mayor, and various other gentlemen addressed the meeting, and letters of apology for non-attendance by Lord Carlisle, Lord Brougham, Sir James Graham, Mr. Thomas Carlyle, and Mr. Dickens, were read. Mr. Carlyle's epistle was a characteristic one. "It is not," he remarks, "by speaking visitors and transient strangers, however wise and well-disposed, that any benefit

can be done you: it is only by the wisdom daily present and busy among you that your institution can be wisely guided and have good success; and I have remarked that merely speaking figures, in such cases, yield little permanent help, and often even none, or less than none (if we compute it rightly); that the helper who will help steadfastly in silence, and, with continuous loyalty, exerts himself by the silent methods, is the only profitable one in the long run. I hope there are many such among you; and that by degrees your reading-room (furnished with good and wise books, not with bad and foolish ones, which are worse than none), may become the rallying point of all the sincere and serious-minded workers in Carlisle, that they may try with their best skill what can be achieved towards self-culture (the true aim of every human soul), by honest co-operation in this kind. Mechanics' Institutes, and the like modern establishments, when I have looked at them, seem to me to have died, or to be dying, very much because of their fatal belief in the efficacy of platform operations and the saving nature of public speaking; a frightful though a very common error in these times! An army that spends much of its strength in beating drums and sounding trumpets is not in a good way. Better march with steady hearts and pace, and with a minimum of drumming!"

CONSUMPTION OF SMOKE.—The operation of feeding a large steam-boiler furnace without producing smoke is thus described by the *Glasgow Mail*. This satisfactory result is secured by the adoption of a newly-invented description of boiler made with two furnaces, in which the flame from the one furnace meets with and consumes the smoke from the other. Of course the furnaces require to be fed alternately, so as to secure the having one furnace only at a time in a green state. The principle of alternate firing is not new, but we understand that until very lately no boilers were made by which the principle could be carried into practical operation. The one we saw has been made by Mr. Gray, of Washington-street, for the Messrs. McFarlane, distillers, Port Dundas. A well-sustained effort for the general adoption of such means will go far to remove from us the plague of smoke.